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ABSTRACT

In this practical, easy-to-use guide, suggestions are made for setting educational objectives and preparing a teacher-made test. Specific suggestions are made for selecting items for essay tests, multiple choice tests, completion tests, matching tests, and true-false tests. (BW)

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# STRATEGIES FOR IMPROVING TEACHER-MADE TESTS

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With today's teacher individualizing the instructional programs to meet students' abilities and needs there is an urgent need for the teacher to become skillful in the construction of teacher-made tests.

Prior to the construction of any teacher-made test, it is essential that a teacher carefully plan the educational objectives for the class. Educational objectives are described in different ways, from the very general objectives, to ones that are very specific.

Specific objectives will provide the necessary guidance to the teacher in ascertaining what is to be taught and what is to be evaluated: therefore, concern must be given to the procedure of defining the objectives.

The following suggestions are offered to assist the teacher in the writing of specific objectives.

1. Always state specific objectives in terms of what can realistically be obtained within the content of an explicit course of instruction.

2. Always state specific objectives in terms of the students and the learning experiences.

3. Always state specific objectives in terms of observable behavioral changes in the students that can be evaluated.

## PREPARING THE TEST

Constructing an effective teacher-made test requires a great amount of time, patience, and hard work. The following suggestions should be helpful in preparing a test:

1. Begin the preliminary draft of a test as soon as possible. This will permit the teacher an opportunity to record suitable test

items as they become evident through the teaching-learning situation, and will allow a later time to re-read the material and make a more objective appraisal as to its test value.

2. Whenever it is possible, include more test items in the first draft of the test than will be needed. This practice will allow the teacher the chance to discard some items, combine others, to adequately measure his objectives.

3. It is desirable to vary the type of test items used. Students will have an opportunity to utilize their abilities for recall, recognization, memorization and writing skills. Naturally, this cannot always be accomplished since some materials do not readily lend themselves to a variety of test items.

4. Always strive for a wide range of difficulty in test items in order to be able to distinguish the differences in ability between students. The range should be from a few, very easy items at the beginning, to a few very hard ones at the end; the average difficulty of all items should be about 50 per cent. This wide range of difficulty will assure the teacher a "spread" in the range of scores.

5. All students should have a chance to read each item on the test in the allotted time.

6. Encourage students to develop critical thinking, and "good" study habits by avoiding the use of the exact wording of the material presented to them when writing test items.

7. The wording in a test item should be phrased so that the content rather than the form of the statement will determine the answer. Try to avoid statements containing emphatic words such as "never," "always," "entirely." They are more likely to be false than true. Words or expressions that weaken a statement, such as "in general" or "sometimes," are more likely to make a statement true than false.

8. Arrange similar test items, such as true-false, completion, and multiple choice, together in the test. This arrangement enables the students to concentrate on a particular "way" to answer the questions. Also, it is easier to score similar groups of test items when they are together.

9. Directions for taking the test should be clear, complete and understood by every student in the group. The degree of detail given in the directions will depend upon the type of test, the age of the students, and the variables surrounding the test.

10. Occasionally, the teacher should submit the test to fellow teachers for their evaluation and constructive criticism. This practice sometimes will avoid making common errors experienced by seasoned teachers in constructing their own tests.

## SELECTION OF TEST ITEMS

The most widely used test items are the essay, multiple-choice, completion, matching, and true-false. The teacher has the choice of either using only one type of test item, or a combination of test items.

### The Essay Test

An essay test item requires the student to write a sentence, a paragraph, or a longer composition for an answer. An essay test item usually consists of a question requiring the student to compare, outline, list contrast, describe, discuss, summarize, develop, explain, or evaluate.

#### Advantages

An essay test item:

1. Will allow students relative freedom with respect to their writing skills in expressing themselves in their answers.
2. Will require the students to utilize higher levels of reasoning, organizing, and applying their knowledge in response to the answer.
3. Will demand that students "think-out" their answers, rather than make a selection from among alternatives supplied to them in an objective-type test.

#### Disadvantages

An essay test item:

1. Can only be graded through subjective procedures by the teacher.
2. Generally will lack reliability in grades as well as content validity. Studies have revealed that a teacher will assign a different grade to an essay answer at a later time. Likewise, two teachers will assign different grades to the same essay test item.
3. Can only cover a limited amount of subject matter and thereby requires the teacher to make a subjective judgment as to the test's content.
4. Many times will confront the teacher with a number of irrelevant factors surrounding the answer such as: handwriting, spelling, English usage, and even "bluffing" on the part of those students who do not know the answer.
5. Unfortunately, takes more time to answer than other forms of test items; a relatively few test items can be answered in most class periods allotted for testing purposes.

6. May tend to "favor" a select group of students who are more skillful in their ability to express themselves in writing than less capable students.

Improving the Quality

In order to improve the quality of an essay test item:

1. It should always be prepared well in advance of the testing date.
2. It should be worded so specifically that all the students in the class will have the same meaning conveyed to them by the test item.
3. All students should answer the same test items; the only exception to this is when you desire, in addition to the regular test items, several more comprehensive ones for the more capable student.

## The Multiple-Choice Test

Most multiple-choice test items consist of either an introductory statement, or a question with several alternative responses listed which will complete the statement or question. One of these alternative responses is the correct answer, and the others are incorrect.

Advantages

A multiple-choice test item:

1. Can be scored quickly and objectively.
2. Can be used to measure the various levels of learning in both the cognitives and affective domains.
3. Will reduce the chance of "guessing" the correct answer by students, as on a true-false test item.
4. Will produce a more reliable measurement of the student's abilities than other forms of test items because of its adaptability.

Disadvantages

A multiple-choice test item:

1. Is far more time-consuming to construct than other objective type test items.
2. Demands the students spend more time in reading and answering the test items than do other objective type test items.

Improving the Quality

In order to improve the quality of a multiple-choice test item:

1. There should never be more than one acceptable answer to a test item.
2. The alternative choices must clearly be plausible to the students.
3. The acceptable answer must always appear to be the best choice to the students.
4. The correct choice should be placed equally often in each possible position to avoid serving as a clue to the students as to the answer.
5. The number of alternative choices should be at least four, preferably five, but never more than five choices.

## The Completion Test

The completion test item requires the student to be able to provide the correct word, short phrase, or number for an answer.

Advantages

The completion test item:

1. Is easier to construct than the multiple-choice test item.
2. Is easier to score than the essay test item; however, it cannot be scored as objectively as the other objective-type test items.
3. Requires the students to recall previously learned materials in order to correctly answer the test item.
4. Is more difficult for students to "guess" the correct answer because they must recall previously learned material for the answer.

Disadvantages

The completion test item:

1. Is less objective than other objective-type items since the teacher is required to make subjective judgments in scoring many of the answers.
2. Must be written in such a way that the students can answer the test item with either a word or a short phrase.

Improving the Quality

In order to improve the quality of the completion test item:

1. It usually should be worded as a question rather than as an incomplete statement.

2. It should have the blank space(s) at or near the end of the question.

3. Whenever possible it should contain only one blank space. However, if necessary, two spaces, but never more than two blank spaces can be used.

4. Remember when using a statement from printed materials to reword the information so it is not quoted exactly.

## The Matching Test

A matching test is made up of two lists requiring the students to match the items from one list with the appropriate items of the other to obtain the correct answer. The directions that the teacher gives the students should include the basis of matching the item and the method of indicating the correct answer.

Advantages

A matching test item:

1. Can be scored quickly and objectively by the teacher.

2. Can be constructed relatively easily and quickly by the teacher.

3. Will give less chance to the students to "guess" the correct answer than a true-false test item.

Disadvantages

A matching test item:

1. Cannot be used successfully in measuring understanding of generalizations and concepts, as it limits the students to identifying general relationships.

2. Requires that there must be parallel relationships between the test item used, thereby limiting the number of situations in which it can be used validly.

Improving the Quality

In order to improve the quality of the matching test item:

1. Never construct an exercise using more than ten to twelve items.
2. The terms in both lists should be arranged alphabetically, or in some other logical or systematic order.
3. The number of items in the column from which the matching items are to be selected should always exceed the number of items in the opposite list.
4. There should be a high degree of homogeneity in every set of matching items.
5. The same response may be used more than once. However, there should never be more than one correct choice for each item.

## The True-False Test

A true-false test item gives the student a choice between two alternatives for the correct answer. A statement is either true or false. The true-false item can only make a direct evaluation of those objectives that are concerned with the students' ability to identify correct or incorrect statements.

Advantages

A true-false test item:

1. Can be constructed in a relatively short amount of time by the teacher.
2. Will allow the teacher to score it quickly and objectively.
3. Will permit the students an opportunity to answer more test items in a given test period than any other type of test item.

Disadvantages

A true-false test item:

1. Provides the students with only two alternatives to choose from in answering the test item, thereby permitting them a fifty-fifty chance of "guessing" the correct answer.
2. Causes difficulty in obtaining a reliable indication of the students' strengths and weaknesses when analyzing their test papers because of the inherent fifty-fifty "guessing" problem.

Improving the Quality

In order to improve the quality of a true-false test item:

1. Use only statements which are clearly true or false.
2. Try to avoid long, involved statements, especially those containing dependent clauses, complex ideas, and many qualifications.
3. Never include more than a single idea in one statement, especially if one idea is true and the other false.
4. Avoid using negative statements whenever possible.
5. Whenever possible include an equal number of true and false test items in a test.

## CONCLUSION

It is hoped that this concise treatment of the principles of test construction and improvement will be useful to the beginning teacher who needs a practical, easily-used guide for preparing classroom tests. It should also be useful to the experienced teacher who needs a handy check list for periodically reviewing and improving his own testing practices. Always remember an examination is a technique to evaluate what knowledge the students have learned, what direction the teacher must continue and not a means to "punish" students. Good examination questions are welcomed by students who understand and appreciate what they are trying to evaluate.

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